

Meeting the Challenge

We are once again proud to present to you our annual water quality report. This edition covers all testing completed from January 1 through December 31, 2007. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal drinking water standards. We continually strive to adopt new and better methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the challenges of source water protection, water conservation and community education while continuing to serve the needs of all our water users.

Please share with us your thoughts about the information in this report. After all, well-informed customers are our best allies.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Substances That Might be in Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's "Safe Drinking" Water Hotline at (800) 426-4791.

WELL-INFORMED CUSTOMERS ARE OUR BEST ALLIES.

Where Does My Water Come From?

Indian River County customers are fortunate because we enjoy an abundant groundwater supply from two treatment plants: the South County Water Treatment Plant and the Hobart Water Treatment Plant, which is located in the north section of the county. Both plants draw water from the Floridan Aquifer, which averages 750 feet deep, and both are treated by reverse osmosis process. Combined, our treatment facilities provide roughly 3.1 billion gallons of clean drinking water every year. Our constant goal is to provide you with a safe and dependable supply of drinking water.

In 2004 the Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are seven potential sources of contamination identified for this system with four moderate levels of petroleum storage tanks and three low levels of Industrial waste. The assessment results are available on the FDEP Source Water Assessment and Protection Program Web site at www.dep.state.fl.us/swapp or they can be obtained from the Indian River County Utilities.

Water Conservation

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity;
- Turn off the tap when brushing your teeth;
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year;
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year;
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.



Tap vs. Bottled

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25% of bottled water is actually just bottled tap water (40% according to government estimates).

The Food and Drug Administration is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70% of all bottled water sold in the United States.

People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to \$1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water.

For a detailed discussion on the NRDC study results, check out their Web site at www.nrdc.org/water/drinking/bw/exesum.asp.



Sampling Results

During the year 2007 we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. We feel it is important that you know exactly what was detected and how much of the substance was present in the water.

The State of Florida allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

Microbiological Contamina	ants									
CONTAMINANT AND UNIT OF MEASUREMENT	DATE SAMPL (MO./Y	ING	MCL VIOLATION (YES/NO)	HIGHEST MONTHLY PERCENTAGE/ NUMBER	MCLG	M	CL	LIKELY SO	JRCE OF	CONTAMINATION
Total Coliform Bacteria (% positive samples)	11/0)7	No	0.81	0		liform bacteria nthly samples	Naturally	present i	in the environment
Radiological Contaminants	3									
CONTAMINANT AND UN MEASUREMENT	IT OF		OF SAMPLIN (MO./YR.)	G MCL VIOLATION (YES/NO)		VEL DETECTED ¹	RANGE OF RESULTS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATIO
Radium 226 + 228 [Combined Radium] (pCi/L)			04/03	No		0.6	0.2–0.6	0	5	Erosion of natural deposits
norganic Contaminants										
Antimony (ppb)			02/05	No		0.2	NA	6	6	Discharge from petroleum refineries; fire retardants; ceramics electronics; solder
Arsenic (ppb)			02/05	No		0.3	ND-0.3	NA	10	Erosion of natural deposits; runof from orchards; runoff from glass and electronics production wastes
Asbestos (MFL)			03/02	No		0.94	ND-0.94	7	7	Decay of asbestos cement water mains; erosion of natural deposits
Barium (ppm)			02/05	No		0.0078	0.0058-0.007	78 2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)			02/05	No		0.83	0.58–0.83	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories; water additiv that promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm
Nickel (ppb)			02/05	No		0.34	0.33-0.34	NA	100	Pollution from mining and refining operations; natural occurrence in soil
Nitrate [as Nitrogen] (ppm)			02/07	No		0.0089	0.0082-0.008	39 10	10	Runoff from fertilizer use; leachir from septic tanks, sewage; erosior of natural deposits
Selenium (ppb)			02/05	No		0.8	NA	50	50	Discharge from petroleum and metal refineries; erosion of natura deposits; discharge from mines
Sodium (ppm)			02/05	No		62	60–62	NA	160	Salt water intrusion, leaching from soil
Thallium (ppb)			02/05	No		0.5	0.4–0.5	0.5	2	Leaching from ore-processing site discharge from electronics, glass, and drug factories
Volatile Organic Contamina	ants									
Dichloromethane (pp	ob)		6/07	No		1.6	0.87–5	0	5	Discharge from pharmaceutical and chemical factories

Stage 1 Disinfectants and	Disinfection B	y-Products								
CONTAMINANT AND UNIT OF MEASUREMENT		SAMPLING ./YR.)	MCL VIOLATION (YES/NO)	LEVEL DETECTED ²	RANGE C)F	MCLG OR MRDLG]	MCL OR [MRDL]	LIKELY SOURCE OF CONTAMINATION	
Chlorine (ppm)	1/07	-12/07	No	1.44	1.39–1.	50	[4]	[4.0]	Water additive used to control microbes	
Haloacetic Acids (five) [HAA5] (ppb)	2007 (quarterly)	No	10.85	2.8–27.	.7	NA	60	By-product of drinking water disinfection	
TTHM [Total trihalomethanes] (ppb)	2007 (quarterly)	No	51.9	30.7–100	0.2	NA	80	By-product of drinking water disinfection	
Lead and Copper (Tap water samples were collected from sites throughout the community)										
CONTAMINANT AND UNIT OF MEASUREMENT	DATE OF SAMPLING (MO./YR.)	AL VIOLATION (YES/NO)	90TH PERCENTII RESULT	LE SITES E	SAMPLING XCEEDING HE AL	MCLG	AL (ACTIO LEVE		Y SOURCE OF CONTAMINATION	
Copper [tap water]	8/05	No	0.0081		0	1.3	1.3	Corr	rosion of household plumbing systems; erosion of	

SECONDARY	CONTAMI	NANTS					
CONTAMINANT AND UNIT OF	DATE OF SAMPLING	MCL VIOLATION	HIGHEST	RANGE OF			
MEASUREMENT	(MO./YR.)	(YES/NO)	RESULT	RESULTS	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION

Footnotes:

(ppm)

- Results in the Level Detected column for radiological contaminants, inorganic contaminants, synthetic organic contaminants including pesticides and herbicides, and volatile organic contaminants are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency.
- ²For bromate, chloramines, or chlorine, the level detected is the the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. For haloacetic acids or TTHM, the level detected is the highest RAA, computed quarterly, of quarterly averages of all samples collected if the system is monitoring quarterly or is the average of all samples taken during the year if the system monitors less frequently than quarterly. Range of Results is the range of individual sample results (lowest to highest) for all monitoring locations, including Initial Distribution System Evaluation (IDSE) results as well as Stage 1 compliance results.
- ³We exceeded the Secondary MCL for Odor. Secondary substances are regulated in order to protect the odor, taste, and appearance of drinking water. Odor violations have no adverse health effects upon public health. There is no absolute threshold for odor concentration because of inherent variation in individual olfactory capability; any given person can have variable olfactory sensitivity over time. Olfactory differences can also occur within the same day and from day-to-day.

Definitions

AL (**Action Level**): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

natural deposits; leaching from wood preservatives

IDSE (**Initial Distribution System Evaluation**): An important part of the Stage 2 Disinfection Byproducts Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MFL (million fibers per liter): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).